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DICKSTEIN SHAPIRO LLP
1177 AVENUE OF THE AMERICAS (6TH AVENUE)
NEW YORK, NY 10036-2714

EXAMINER
LAZARO, DAVID R

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/612,973	SEKINE, AKIHIRO
	Examiner	Art Unit	
	David Lazaro	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 July 2007</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-41</u> is/are pending in the application.

    4a) Of the above claim(s) <u>35-41</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>07 July 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>8/4/03</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1.   Claims 35-41 withdrawn from further consideration pursuant to 37 CFR 1.142(b)

as being drawn to a nonelected invention, there being no allowable generic or linking

claim. Election was made **without** traverse in the reply filed on 07/20/07.

Priority

2.   This application claims the benefit of Japan Application 2002-199253 filed

07/08/2002.

3.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which

papers have been placed of record in the file.

Information Disclosure Statement

4.   The information disclosure statement (IDS) submitted on 8/04/2003 is in

compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure

statement is being considered by the examiner.

Drawings

5.   The drawings filed 07/07/2003 are accepted by the examiner.

Claim Objections

6.   Many of the claims contain minor informalities, particularly typos. Additionally,

the overall formatting makes some of the claims difficult to read due to spacing between

words. The examiner requests that applicant review the claims for any informalities not

found by the examiner.

7.   Claims 5, 8, 9, 11, 14, 15, 16, 17, 18, 24, 27, 30, 31 and 32 are objected to

because of the following informalities:

        a.   In claim 5, "ach" should be "each".

        b.   In claim 8, "opposit" should be "opposite".

        c.   In claim 9, "xecuted" should be "executed".

        d.   In claim 11, "s rves" should be "serves".

        e.   In claims 14, 15, 16, 30, 31 and 32, "A synchronization method" should be

"A data synchronization method" for clarity and consistency.

        f.   In claim 17, "ex cuted" should be "executed".

        g.   In claim 17, "on" should be "one".

        h.   In claim 18, "tim" should be "time".

        i.   In claim 18, "th" should be "the".

        j.   In claim 24, "opposit" should be "opposite".

        k.   In claim 27, "new r" should be "newer".

        l.   In claim 27, "dat" should be "date".

8.   Appropriate correction is required.

9.   Claim 18 is dependent on claim 4. However, Claim 17 is an independent claim.

A series of singular dependent claims is permissible in which a dependent claim refers

to a preceding claim which, in turn, refers to another preceding claim.

A claim which depends from a dependent claim should not be separated by any

claim which does not also depend from said dependent claim. It should be kept in mind

that a dependent claim may refer to any preceding independent claim. In general,

applicant's sequence will not be changed. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 112

10.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

11.   Claims 1, 2, 6, 7, 9, 10, 17, 18, 19, 22, 23, 25, 26, 33 and 34 are rejected under

35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out

and distinctly claim the subject matter which applicant regards as the invention.

12.   Claims 1, 2, 6, 7, 9, 10, 17, 22, 23, 25, 26, 33 and 34 each use the language "the

self". Particularly, claims 1, 2, 17 and 18 include "the self data"; claims 6, 7, 22, 23 and

25 include "the self group management data thereof"; claims 7, 10, 23 and 26 include

"the self time stamp information"; claims 9, 10, 25 and 26 use "the self information

apparatus management data thereof"; claims 33 and 34 use "the self information

apparatus". It is not distinctly clear as to the meaning of "self" when combined with the

claim language as listed above.

13.   Claims 1, 2, 6, 10, 17, 18, 22, 23, 25 and 26 include the language "fetching the

newest". It is not distinctly clear as to what functionality is imparted by this language in

relation to the claimed subject matter (i.e., what does is meant to update the self data

thereof by fetching the newest time stamp information).

14.   Claim 9 recites the limitation "the self group management data thereof". There is

insufficient antecedent basis for this limitation in the claim.

15.   Claim 19 recites the limitation "regarding the first and second data items". There

is insufficient antecedent basis for this limitation in the claim. The examiner notes this is

possibly due to an incorrect dependency. The examiner suggests making sure the

dependency is correct for claim 19

.Claim Rejections - 35 USC § 102

16.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

17.   Claims 1-4, 8-13, 15-20, 24-29 and 31-33 are rejected under 35 U.S.C. 102(b) as

being anticipated by U.S. Patent 5,710,922 by Alley et al. (Alley).

18.   With respect to claim 1, Alley teaches a data synchronization method between a

plurality of information apparatus for performing synchronization of data stored in said

information apparatus, a record which forms data retained by each of said information

apparatus including one or more data items, comprising:

a step, executed by each of said information apparatus when self data thereof is updated, of fetching time stamp information which indicates updating date and time for each of the data items (Col. 7 lines 47-51 and Col. 10 lines 18-39: updates are tracked through data and time information which is used in synchronizing steps);

a step, executed by a first one of said information apparatus, of transmitting the self data thereof including the time stamp information of each of the data items to a second one of said information apparatus which is a destination of data synchronization (Col. 10 lines 18-39 and Col. 11 lines 12-38: data items and the time and data information is compared between the devices); and

a step, executed by the second information apparatus upon reception of the data transmitted from the first information apparatus, of comparing, regarding a data item which is an object of updating, the time stamp information of the self data thereof and the time stamp information transmitted from the first information apparatus with each other and fetching the newest time stamp information to update the self data thereof (Col. 11 lines 12-38 and Col. 12 lines 4-31: data items are updated according to the time and data information).

19.   With respect to claim 2, Alley further teaches a step, executed by the second information apparatus, of transmitting the data including the updated time stamp information of each of the data items to the first information apparatus; and a step, executed by the first information apparatus, of comparing, regarding the data item which is an object of updating, the time stamp information transmitted from the second information apparatus with each other and fetching the newest time stamp information

to update the self data thereof (Col. 11 lines 27-39: both devices exchange information for the update/synchronization of information on both devices).

20.   With respect to claim 3, Alley further teaches wherein the data is formed from a plurality of data tables which are related to each other (Col .10 line 32 - Col. 11 line 18: NUMSTORES).

21.   With respect to claim 4, Alley further teaches wherein the record which forms the data includes data which indicates an attribute of the record and a data synchronization process regarding the record is performed in accordance with the attribute (Col. 11 line 43 - Col. 12 line 3: record indicators).

22.   With respect to claim 8, Alley further teaches wherein each of said information apparatus includes information apparatus management data for managing access information to an opposite information apparatus with which the information apparatus is to perform the data synchronization, and accesses, based on the information apparatus management data, the opposite information apparatus with which the information apparatus is to perform the synchronization process (Col. 8 lines 10-18).

23.   With respect to claim 9, Alley further wherein a record which forms the information apparatus management data includes time stamp information which indicates updating date and time of the record (Col. 7 lines 47-51 and Col. 10 lines 18-39), and further comprising: a step, executed by the first information apparatus, of transmitting the information apparatus management data including the time stamp information to the second information apparatus which is the data synchronization destination (Col. 10 lines 18-39 and Col. 11 lines 12-38); and a step, executed by the

second information apparatus upon reception the data transmission from the first

information apparatus, of comparing the time stamp information of the self information

apparatus management data thereof and the time stamp information of the information

apparatus management data transmitted from the first information apparatus with each

other and fetching the newest information apparatus management data to update the

self group management data thereof (Col. 11 lines 12-38 and Col. 8 lines 10-18).

24.   With respect to claim 10, Alley further teaches a step, executed by the second

information apparatus upon reception of the transmission of the information apparatus

management data, of transmitting the information management data thereof including

the time stamp information updated thereby to the first information apparatus; and a

step, executed by the first information apparatus upon reception of the data

transmission, of comparing, regarding the information apparatus management data, the

self time stamp information thereof and the time stamp information transmitted from the

second information apparatus with each other and fetching the newest information

apparatus management data to update the self information apparatus management

data thereof (Col. 11 lines 27-39 and Col. 8 lines 10-18).

25.   With respect to claim 11, Alley further teaches wherein each of said information

apparatus possesses data which indicates last synchronization date and time of each of

said information apparatus which serves as a source of data transmission and performs

data updating only when the time stamp information is newer than the last

synchronization date and time of the information apparatus which is the source of the

data transmission (Col. 12 lines 4-15).

26.   With respect to claim 12, Alley further teaches wherein the data possessed by

each of said information apparatus includes information which indicates an information

apparatus of an origin of data for each record or each data item and does not perform

the synchronization process regarding the record or data item when the information

apparatus of the origin of the data is same as the information apparatus which is a

destination of data synchronization (Col. 14 lines 42 - Col. 15 line 30: LOCAL IDENT).

27.   With respect to claim 13, Alley further teaches information, wherein, in all of said

information apparatus, or in all of those of said information apparatus which belong to a

group in which the data synchronization process is performed, garbage collection is

performed after data synchronization is performed for information that a record of a

processing object is deleted (Col. 11 lines 32-38).

28.   With respect to claim 15, Alley further teaches wherein each of said information

apparatus is selected from among apparatus including a portable telephone set, a

personal computer, a PDA, a PHS terminal, a subscriber telephone set or a slave

machine of a subscriber telephone set (Col. 3 line 62 - Col. 4 line 7).

29.   With respect to claim 16, Alley further teaches wherein, as a communication

method between said information apparatus, a portable telephone network, a

PHStelephone network, a cradle, the Internet, a subscriber telephone network,

communication between a master machine and a slave machine of a subscriber

telephone set, communication between slave machines of a subscriber telephone set or

radio communication is used (Col. 7 line 64 - Col. 8 line 18).

30.   With respect to Claim 17, Alley teaches a data synchronization method between

a plurality of information apparatus for performing synchronization of data stored in said

information apparatus, a record which forms data retained by each of said information

apparatus including a first data item which indicates deletion information of the record

and one or more second data items other than the first data item, comprising: ,

        a step, executed by each of said information apparatus when self data is

updated, of fetching first time stamp information regarding the first data item and

fetching, regarding each of the second data items, second time stamp information which

indicates updating date and time for each of the second data items (Col. 7 lines 47-51

and Col. 10 lines 18-39: updates for each device are tracked through data and time

information which is used in synchronizing steps);

        a step, executed by a first on of said information apparatus, of transmitting the

self data thereof including the first and second time stamp information to a second one

of said information apparatus (Col. 10 lines 18-39 and Col. 11 lines 12-38: data items

and the time and data information is compared between the devices); and

        a step, executed by the second information apparatus upon reception of the data

transmitted from the first information apparatus, of performing comparison, regarding

the first and second data items included in a record of an updating object, between

deletion information of the records, between both of the first time stamp information,

between the first time stamp information and the second time stamp information, or

between both of the second time stamp information and fetching the newest data to

update the self data thereof (Col. 11 lines 12-38 and Col. 12 lines 4-31: data items are updated according to the time and data information).

31.   With respect to claim 18, Alley further teaches a step, executed by the second information apparatus upon reception of the data transmission from the first information apparatus, of transmitting the updated data to the first information apparatus (Col. 11 lines 27-39); and a step, executed by the first information apparatus upon reception of the data transmission from the second information apparatus, of performing comparison, regarding the first and second data items included in the record of the updating object, between both of the deletion information of the records, between both of the first time stamp information, between the first time stamp information and the second time stamp information, or between both of the second time stamp information with each other and fetching the newest data to update the self data thereof (Col. 11 lines 27-39).

32.   With respect to claim 19, Alley further teaches wherein the data is formed from a plurality of data tables which are related to each other (Col .10 line 32 - Col. 11 line 18: NUMSTORES).

33.   With respect to claim 20, Alley further teaches wherein the record which forms the data includes data which indicates an attribute of the record and a data synchronization process regarding the record is performed in accordance with the attribute (Col. 11 line 43 - Col. 12 line 3: record indicators).

34.   With respect to claim 24, Alley further teaches Alley further teaches wherein each of said information apparatus includes information apparatus management data for

managing access information to an opposite information apparatus with which the

information apparatus is to perform the data synchronization, and accesses, based on

the information apparatus management data, the opposite information apparatus with

which the information apparatus is to perform the synchronization process (Col. 8 lines

10-18).

35.   With respect to claim 25, Alley further teaches Alley further wherein a record

which forms the information apparatus management data includes time stamp

information which indicates updating date and time of the record (Col. 7 lines 47-51 and

Col. 10 lines 18-39), and further comprising: a step, executed by the first information

apparatus, of transmitting the information apparatus management data including the

time stamp information to the second information apparatus which is the data

synchronization destination (Col. 10 lines 18-39 and Col. 11 lines 12-38); and a step,

executed by the second information apparatus upon reception the data transmission

from the first information apparatus, of comparing the time stamp information of the self

information apparatus management data thereof and the time stamp information of the

information apparatus management data transmitted from the first information

apparatus with each other and fetching the newest information apparatus management

data to update the self group management data thereof (Col. 11 lines 12-38 and Col. 8

lines 10-18).

36.   With respect to claim 26, Alley further teaches Alley further teaches a step,

executed by the second information apparatus upon reception of the transmission of the

information apparatus management data, of transmitting the information management

data thereof including the time stamp information updated thereby to the first

information apparatus; and a step, executed by the first information apparatus upon

reception of the data transmission, of comparing, regarding the information apparatus

management data, the self time stamp information thereof and the time stamp

information transmitted from the second information apparatus with each other and

fetching the newest information apparatus management data to update the self

information apparatus management data thereof (Col. 11 lines 27-39 and Col. 8 lines

10-18).

37.   With respect to claim 27, Alley further teaches wherein each of said information

apparatus possesses data which indicates last synchronization date and time of each of

said information apparatus which serves as a source of data transmission and performs

data updating only when the time stamp information is newer than the last

synchronization date and time of the information apparatus which is the source of the

data transmission (Col. 12 lines 4-15).

38.   With respect to claim 28, Alley further teaches wherein the data possessed by

each of said information apparatus includes information which indicates an information

apparatus of an origin of data for each record or each data item and does not perform

the synchronization process regarding the record or data item when the information

apparatus of the origin of the data is same as the information apparatus which is a

destination of data synchronization (Col. 14 lines 42 - Col. 15 line 30: LOCAL IDENT).

39.   With respect to claim 29, Alley further teaches wherein, in all of said information

apparatus, or in all of those of said information apparatus which belong to a group in

which the data synchronization process is performed, garbage collection is performed

after data synchronization is performed for information that a record of a processing

object is deleted (Col. 11 lines 32-38).

40.   With respect to claim 31, Alley further teaches wherein each of said information

apparatus is selected from among apparatus including a portable telephone set, a

personal computer, a PDA, a PHS terminal, a subscriber telephone set or a slave

machine of a subscriber telephone set (Col. 3 line 62 - Col. 4 line 7).

41.   With respect to claim 32, Alley further teaches wherein, as a communication

method between said information apparatus, a portable telephone network, a

PHStelephone network, a cradle, the Internet, a subscriber telephone network,

communication between a master machine and a slave machine of a subscriber

telephone set, communication between slave machines of a subscriber telephone set or

radio communication is used (Col. 7 line 64 - Col. 8 line 18).

42.   With respect to claim 33, Alley teaches an information processing apparatus for

use with an information processing system for performing data exchange between a

plurality of information apparatus, comprising:

        data storage means for storing data of the self information apparatus (Col. 7 lines

4-25);

        data reception means for receiving data from an opposite information apparatus

(Col. 10 lines 18-39 and Col. 11 lines 12-38: synchronization information is exchanged

and compared);

data comparison means for comparing the data stored in said data storage

means and the data received by said data reception means (Col. 10 lines 18-39 and

Col. 11 lines 12-38: synchronization information is compared);

data updating means for updating the data of the self information apparatus

based on a result of the data comparison by said data comparison means (Col. 11 lines

12-38 and Col. 12 lines 4-31: data items are updated according to the time and data

information);

time management means for managing data updating time of the day in said data

updating means (Col. 7 lines 47-51 and Col. 10 lines 18-39: timing means for tracking

updates); and

data transmission means for transmitting the data possessed by the self

information apparatus to the opposite information apparatus (Col. 8 lines 1-18).

Claim Rejections - 35 USC § 103

43.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

44.   Claims 5-7, 21-23 and 34 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Alley in view of U.S. Patent 6,732,144 by Kizu et al. (Kizu).

45.   With respect to claim 5, Alley teaches all the limitations of claim 1, but does not

explicitly disclose wherein said information apparatus are divided into arbitrary groups

each of which defines a range within which data exchange is to be performed, and each

of said information apparatus includes, regarding all information apparatus which belong

to a group to which the information apparatus itself belongs, group management data

for managing a relationship regarding to which group each of said information apparatus

belongs and selects, based on the group management data, an opposite information

apparatus with which the information apparatus itself is to perform the synchronization

process.

Kizu teaches dividing devices into arbitrary synchronization groups (Col. 5 line 65

- Col. 6 line 49), each defining a range within which data exchange is to be preformed

(Co. 11 line 40 - Col. 12 line 8). Each device includes group management data related

to devices which belong to the same group and for managing a relationship regarding to

which group each of said information apparatus belongs and selects, based on the

group management data, an opposite information apparatus with which the information

apparatus itself is to perform the synchronization process (Col. 7 line 37 - Col. 8 line 5).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to take the method disclosed by Kizu and modify it as indicated by

Alley such that it further comprises wherein said information apparatus are divided into

arbitrary groups each of which defines a range within which data exchange is to be

performed, and each of said information apparatus includes, regarding all information

apparatus which belong to a group to which the information apparatus itself belongs,

group management data for managing a relationship regarding to which group each of

said information apparatus belongs and selects, based on the group management data,

an opposite information apparatus with which the information apparatus itself is to

perform the synchronization process. One would be motivated to have this, as it is

desirable to provide a synchronization process between arbitrary devices without a

server and in a one to many manner (In Kizu: Col. 2 line 1-26).

46.   With respect to claim 6, Alley further teaches a step, executed by each of said

information apparatus, of fetching time stamp information which indicates updating date

and time of each record of the group management data (In Alley: Col. 7 lines 47-51 and

Col. 10 lines 18-39, and In Kizu: Col. 15 line 37 - Col. 16 line 14);

a step, executed by the first information apparatus, of transmitting the group

management data including the time stamp information to the second information

apparatus which is a destination of data synchronization (In Alley: Col. 10 lines 18-39

and Col. 11 lines 12-38, and In Kizu: Col. 15 line 37 - Col. 16 line 14); and

a step, executed by the second information apparatus upon reception of the data

transmission from the first information apparatus, of comparing the time stamp

information of the self group management data thereof and the time stamp information

of the group management data transmitted from the first information apparatus with

each other and fetching the newest group management data to update the self group

management data thereof (In Alley: Col. 11 lines 12-38 and Col. 12 lines 4-31, and In

Kizu: Col. 15 line 37 - Col. 16 line 14).

47.   With respect to claim 7, Alley further teaches a step, executed by the second

information apparatus upon reception of the transmission of the group management

data, of transmitting the group management data thereof including the time stamp

information updated thereby to the first information apparatus; and a step, executed by

the first information-apparatus upon reception of the data transmission from the second

information apparatus, of comparing, regarding the group management data, the self

time stamp information thereof and the time stamp information transmitted from the

second information apparatus with each other and fetching the newest group

management data information to update the self group management data thereof (In

Alley: Col. 11 lines 27-39, and In Kizu: Col. 15 line 37 - Col. 16 line 14).

48.   With respect to claim 21, Alley does not explicitly disclose wherein said

information apparatus are divided into arbitrary groups each of which defines a range

within which data exchange is to be performed, and each of said information apparatus

includes, regarding all information apparatus which belong to a group to which the

information apparatus itself belongs, group management data for managing a

relationship regarding to which group each of said information apparatus belongs, and

selects, based on the group management data, an opposite information apparatus with

which the information apparatus itself is to perform the synchronization process.

    Kizu teaches dividing devices into arbitrary synchronization groups (Col. 5 line 65

- Col. 6 line 49), each defining a range within which data exchange is to be preformed

(Co. 11 line 40 - Col. 12 line 8). Each device includes group management data related

to devices which belong to the same group and for managing a relationship regarding to

which group each of said information apparatus belongs and selects, based on the

group management data, an opposite information apparatus with which the information

apparatus itself is to perform the synchronization process (Col. 7 line 37 - Col. 8 line 5).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to take the method disclosed by Kizu and modify it as indicated by

Alley such that it further comprises wherein said information apparatus are divided into

arbitrary groups each of which defines a range within which data exchange is to be

performed, and each of said information apparatus includes, regarding all information

apparatus which belong to a group to which the information apparatus itself belongs,

group management data for managing a relationship regarding to which group each of

said information apparatus belongs, and selects, based on the group management data,

an opposite information apparatus with which the information apparatus itself is to

perform the synchronization process. One would be motivated to have this, as it is

desirable to provide a synchronization process between arbitrary devices without a

server and in a one to many manner (In Kizu: Col. 2 line 1-26).

49.   With respect to claim 22, Alley further teaches a step, executed by each of said

information apparatus, of fetching time stamp information which indicates updating date

and time of each record of the group management data (In Alley: Col. 7 lines 47-51 and

Col. 10 lines 18-39, and In Kizu: Col. 15 line 37 - Col. 16 line 14);

a step, executed by the first information apparatus, of transmitting the group

management data including the time stamp information to the second information

apparatus which is a destination of data synchronization (In Alley: Col. 10 lines 18-39

and Col. 11 lines 12-38, and In Kizu: Col. 15 line 37 - Col. 16 line 14); and

a step, executed by the second information apparatus upon reception of the data

transmission from the first information apparatus, of comparing the time stamp

information of the self group management data thereof and the time stamp information

of the group management data transmitted from the first information apparatus with

each other and fetching the newest group management data to update the self group

management data thereof (In Alley: Col. 11 lines 12-38 and Col. 12 lines 4-31, and In

Kizu: Col. 15 line 37 - Col. 16 line 14).

50.   With respect to claim 23, Alley further teaches a step, executed by the second

information apparatus upon reception of the transmission of the group management

data, of transmitting the group management data thereof including the time stamp

information updated thereby to the first information apparatus; and a step, executed by

the first information-apparatus upon reception of the data transmission from the second

information apparatus, of comparing, regarding the group management data, the self

time stamp information thereof and the time stamp information transmitted from the

second information apparatus with each other and fetching the newest group

management data information to update the self group management data thereof (In

Alley: Col. 11 lines 27-39, and In Kizu: Col. 15 line 37 - Col. 16 line 14).

51.   With respect to claim 34, Alley teaches an information processing apparatus for

use with an information processing system for performing data exchange between a

plurality of information apparatus, comprising:

data storage means for storing data of the self information apparatus (Col. 7 lines 4-25);

data reception means for receiving data from an opposite information apparatus (Col. 10 lines 18-39 and Col. 11 lines 12-38: synchronization information is exchanged and compared);

data comparison means for comparing the data stored in said data storage means and the data received by said data reception means (Col. 10 lines 18-39 and Col. 11 lines 12-38: synchronization information is compared);

data updating means for updating the data of the self information apparatus based on a result of the data comparison by said data comparison means (Col. 11 lines 12-38 and Col. 12 lines 4-31: data items are updated according to the time and data information);

time management means for managing data updating time of the day in said data updating means (Col. 7 lines 47-51 and Col. 10 lines 18-39: timing means for tracking updates); and

data transmission means for transmitting the data possessed by the self information apparatus to the opposite information apparatus (Col. 8 lines 1-18).

Alley does not explicitly disclose said plurality of information apparatus being divided into groups of apparatus within which the apparatus perform data exchange with each other, each of said information apparatus possessing group management data for managing a group belonging destination regarding all of those of said information apparatus which belong to a group to which the self information apparatus belongs; and

group management data storage means for-storing group management data of the self

information apparatus; group management data comparison means for comparing the

data Stored in said group management data storage means and group management

data of the opposite information apparatus transmitted through said data reception

means with each other; group management data updating means for updating the group

management data of the self information apparatus based on a result of the comparison

by said group management data comparison means.

Kizu teaches dividing devices into arbitrary synchronization groups (Col. 5 line 65

- Col. 6 line 49), each defining a range within which data exchange is to be preformed

(Co. 11 line 40 - Col. 12 line 8). Each device includes group management data related

to devices which belong to the same group and for managing a relationship regarding to

which group each of said information apparatus belongs and selects, based on the

group management data, an opposite information apparatus with which the information

apparatus itself is to perform the synchronization process (Col. 7 line 37 - Col. 8 line 5).

Group synchronization for devices in the group provides for updates to the group

management data (Col. 7 line 37 - Col. 8 line 5).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to take the apparatus disclosed by Kizu and modify it as indicated

by Alley such that it further comprises said plurality of information apparatus being

divided into groups of apparatus within which the apparatus perform data exchange with

each other, each of said information apparatus possessing group management data for

managing a group belonging destination regarding all of those of said information

apparatus which belong to a group to which the self information apparatus belongs; and

group management data storage means for-storing group management data of the self

information apparatus; group management data comparison means for comparing the

data Stored in said group management data storage means and group management

data of the opposite information apparatus transmitted through said data reception

means with each other; group management data updating means for updating the group

management data of the self information apparatus based on a result of the comparison

by said group management data comparison means. One would be motivated to have

this, as it is desirable to provide a synchronization process between arbitrary devices

without a server and in a one to many manner (In Kizu: Col. 2 line 1-26).

52.   Claims 14 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Alley in view of U.S. Patent Application Publication 2001/0011308 by Clark et al.

(Clark).

53. ' With respect to claim 14, Alley further teaches essentially teaches performing an

automated synchronization process when the user chooses (Col. 9 line 66 - Col. 10 line

4). Alley does not explicitly disclose wherein the data synchronization process is

performed automatically in accordance with a predetermined time schedule.

    Clark teaches an automated synchronization process can be performed

according to a variety of user selectable levels. This can include performing the

process in accordance with a predetermined time schedule (Page 1-2, [0010]).

Because both Alley and Clark teach methods for performing an automated synchronization process, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of performing an automated synchronization process.

54.   With respect to claim 30, Alley further teaches essentially teaches performing an automated synchronization process when the user chooses (Col. 9 line 66 - Col. 10 line 4). Alley does not explicitly disclose wherein the data synchronization process is performed automatically in accordance with a predetermined time schedule.

Clark teaches an automated synchronization process can be performed according to a variety of user selectable levels. This can include performing the process in accordance with a predetermined time schedule (Page 1-2, [0010]).

Because both Alley and Clark teach methods for performing an automated synchronization process, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of performing an automated synchronization process.

Conclusion

55.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

56.   U.S. Patent 5,261,094 by Everson. November 9, 1993. - includes synchronization of databases through the use of update tables tracked by time and date.

57.   U.S. Patent 6,295,541 by Bodnar et al. September 25, 2001. - discloses

synchronization of two or more datasets including the comparison of timestamps.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to David Lazaro whose telephone number is 571-272-

3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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David Lazaro
September 25